

**REMARKS**

In the Official Action mailed 14 April 2008, the Examiner has rejected claims 1-5, 8, 12, and 33-35 under 35 U.S.C. §102(b); and has rejected claims 6, 7, 9-11, 13-18 and 36-38 under 35 U.S.C. §103(a).

Claims 1-18 and 33-38 remain pending.

**Rejection of Claims 1-5, 8, 12, and 33-35 under 35 U.S.C. §102(b)**

The Examiner has rejected claims 1-5, 8, 12, and 33-35 under 35 U.S.C. §102(b) as being anticipated by Shingleton (US Patent 6,058,930).

**Rejection of Claims 6 and 7 under 35 U.S.C. §103(a)**

The Examiner has rejected claims 6 and 7 under 35 U.S.C. §103(a) as being unpatentable over Shingleton (US Patent 6,058,930) as applied to claim 1 above, and in further view of Olah (US Patent 6,399,874).

**Rejection of Claims 9-11 under 35 U.S.C. §103(a)**

The Examiner has rejected claims 9-11 under 35 U.S.C. §103(a) as being unpatentable over Shingleton (US Patent 6,058,930) as applied to claim 8 above, and in further view of Berman et al. (US Patent 4,633,085).

**Rejection of Claims 13, 14, and 17 under 35 U.S.C. §103(a)**

The Examiner has rejected claims 13, 14, and 17 under 35 U.S.C. §103(a) as being unpatentable over Shingleton (US Patent 6,058,930) as applied to claim 12 above, and in further view of Catella et al. (US Patent 4,611,090).

**Rejection of Claim 15 under 35 U.S.C. §103(a)**

The Examiner has rejected claim 15 under 35 U.S.C. §103(a) as being unpatentable over Shingleton (US Patent 6,058,930) and Catella et al. (US Patent 4,611,090) as applied to claim 13 above, and in further view of Berman et al. (US Patent 4,633,085).

**Rejection of Claim 16 under 35 U.S.C. §103(a)**

The Examiner has rejected claim 16 under 35 U.S.C. §103(a) as being unpatentable over Shingleton (US Patent 6,058,930), Catella et al. (US Patent 4,611,090) as applied to claim 13 above and in further view of Yamawaki et al. (US Patent 6,489,552 B2).

Rejection of Claim 18 under 35 U.S.C. §103(a)

The Examiner has rejected claim 18 under 35 U.S.C. §103(a) as being unpatentable over Shingleton (US Patent 6,058,930) as applied to claim 8 above, in view of Blieden et al. (US Patent 4,153,813).

Rejection of Claim 36 under 35 U.S.C. §103(a)

The Examiner has rejected claim 36 under 35 U.S.C. §103(a) as being unpatentable over Shingleton (US Patent 6,058,930) as applied to claim 33 above, in view of Morton (US Patent 6,341,451 B1).

Rejection of Claims 37 and 38 under 35 U.S.C. §103(a)

The Examiner has rejected claims 37 and 38 under 35 U.S.C. §103(a) as being unpatentable over Shingleton (US Patent 6,058,930) and Morton (US Patent 6,341,451 B1) as applied to claim 36 above, in view of Stahl et al. (US Patent 5,588,829).

The Cited Art

US patent number 6,058,930 to Shingleton discloses a solar array 80 (see figure 9A) of several rows 30 of solar panels 14. The solar panels 14 are mounted to torque tubes 12 which are journaled to the upper ends of vertical piers 16. A linear actuator 42 is used to rock the rows 30 of solar panels 14 between East-facing and West-facing orientations.

The patent to Catella (U.S. Patent No. 4,611,090) discloses a semi rigid support member 10 for supporting flexible PV modules 22. Flexible PV modules 22 are secured to semi rigid support member 10 using adhesive. (Figure 4, column 8/ lines 12-18) The embodiment of figure 5 discloses an array of 30 of support members 32. Each support member 32 includes a frame 33 having inwardly extending rib stiffeners 36 that terminate near the center at a rectangular structure 37. Posts 43 are used to connect the support members 32 at each end of the array 32 to a base 42 at each end.

The Morton patent (U.S. Patent No. 6,341,451) discloses a portable garage 10 having solar panels 21, 22 on its top wall 12. The solar panels are used to power, for example, cylinder and arm members 29, 30 to open and close garage door 24.

The Klintworth patent (U.S. Patent No. 6,345,580) is directed to a thrust gate with a row of movable grate plates 5 which can be opened or closed to adjust the amount of air flowing through the thrust gate from below. The invention can be used in industrial processes, such as for cooling cement clinkers or for refuse incineration (5/1-4). The apparently mis-cited Stahl

patent describes an alternative version of a thrust grate cooler use to, for example, cool cement clinkers emerging from a rotary kiln (1/9-11).

### The Cited Art Distinguished

#### **Claim 1**

1. In section 3 at pages 2-3 of the office action the Examiner characterizes Shingleton as disclosing a modular shade system. While it may be true that the tracking solar collectors of Shingleton will provide shade, calling it as a tracking shade system mischaracterizes it; rather, as stated in the title, it is a "Solar Collector and Tracker Arrangement".
2. The Examiner's rejection of claim 1 as anticipated by Shingleton includes the following:
  - a. "a shade structure (this enhanced shading is provided by the panels) positioned at a selected location between selected one of the torque tubes and above the support surface so to provide an enhanced shade region thereunder (the panels are fixed to the torque tubes as described above);"
  - b. "a second mounting (footing, 38, and pier, 36) for supporting the shade structure at the selected location;"

It appears these are exactly the same rejections as to the shade structure as in the last office action. However, claim 1 was amended to recite

1. "a stationary shade structure positioned at a fixed location between selected ones of the torque tubes and above the support surface..."
2. "a support structure comprising: ... a second mounting assembly supporting the shade structure at a fixed location;"

The Examiner's rejection of claim 1 has failed to address these claims elements as amended by the prior amendment.

3. Nothing in Shingleton suggests that any of the solar collectors should act as a stationary shade structure positioned at a fixed location as is presently claimed. To the contrary, Shingleton teaches away from making any of the solar collectors be stationary structures at a fixed location because doing so would lessen the amount of sun exposure and thus reduce the amount of energy from the solar collector.
4. The Examiner's statement at section 14, pages 13-14 of the office action has no real bearing on claim 1. Applicant does not disagree that the solar collectors of Shingleton provide shade whether mounted on a rooftop were on the ground; however that is not the issue. The

issue is whether or not claim 1, as presently claimed, is patentable over Shingleton. For the reasons discussed above, it is.

5. During a telephone interview with the Examiner on 4 June 2008, the Examiner agreed to conduct another search for the same basic reasons as discussed above.

### **Claim 33**

Claim 33 is allowable for the same reasons as is claim 1.

### **The dependent claims**

The **dependent claims** are directed to specific novel subfeatures of the invention and are allowable for that reason as well as by depending from novel parent claims. Because of the Examiner's agreement to conduct a further search, arguments regarding the allowability of specific dependent claims will not be made at this time.

### **CONCLUSION**

It is respectfully submitted that this application is now in condition for allowance, and such action is requested. If the Examiner believes a telephone conference would aid the prosecution of this case in any way, please call the undersigned at (650) 712-0340.

The Commissioner is hereby authorized to charge any fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (PWRL 1029-4).

Respectfully submitted,

Dated: 27 June 2008

/James F. Hann/

James F. Hann, Reg. No. 29,719

HAYNES BEFFEL & WOLFELD LLP  
P.O. Box 366  
Half Moon Bay, CA 94019  
(650) 712-0340 phone  
(650) 712-0263 fax